SEA POWER 21

Projecting Decisive Joint Capabilities

THE CHALLENGE…

“We must take the battle to the enemy, disrupt his plans, and confront the worst threats before they emerge.”

George W. Bush
01 June 2002

“Our Navy is on the leading edge of this fight and…Sea Power 21 will help us fulfill the President’s direction.”

ADM Vern Clark
12 June 2002

Vision

Clear, concise, and powerful

Innovation

A culture of innovation, experimentation, and education

Jointness

Fully integrating naval forces into the joint

MAXIMIZE OUR ADVANTAGES

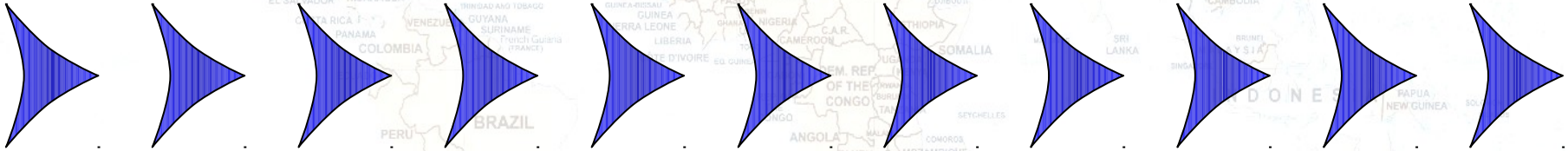
- Exploit U.S. asymmetric strengths
  - Information superiority, persistence, precision, mobility, stealth, reach, speed, lethality, and *people*
- Fully leverage international domain
  - Empower *joint* warfighting across the full extent of a *unified* battlespace

Emergent challenges require enhanced warfighting capabilities

BROADENED STRATEGY

"Our strategy has shifted from a focus on a *global* threat to a focus on *regional challenges…*"

…From the Sea (1992)



"Enhancing security in today's dynamic environment requires us to *expand* our strategic focus to include *both evolving regional challenges and transnational threats*."

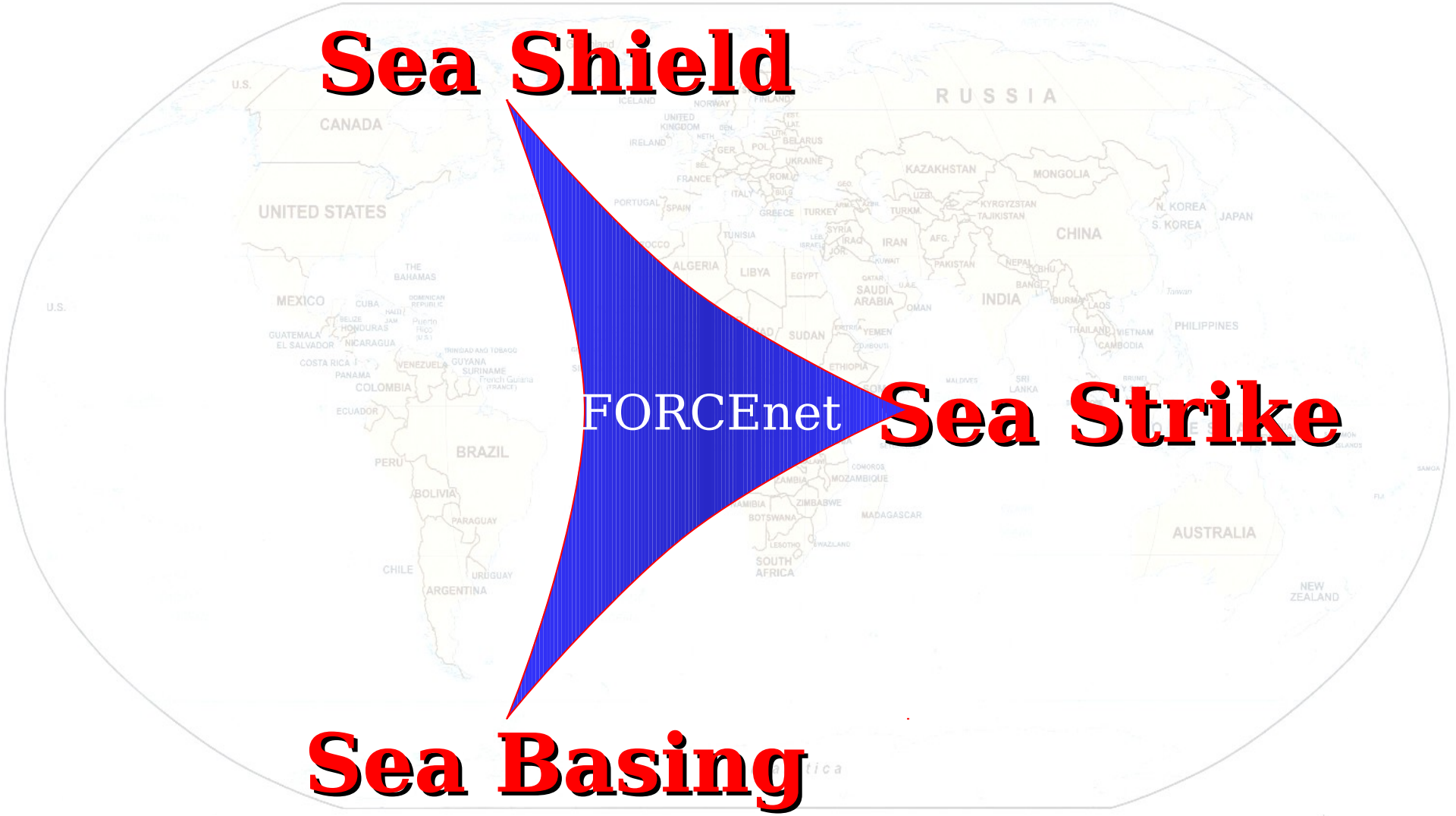
Sea Power 21 (2002)

WHY NOW?

- Strategic environment is dynamic and uncertain
  - Must optimize new combinations of immediately employable, forward deployed joint forces
- Increased alignment with joint services is required
  - Must provide Combatant Commanders with flexible, persistent, agile, and capable naval forces

SEA POWER 21 challenges assumptions…
Prescribes how to operate in the decades ahead

SEA POWER 21



SEA STRIKE

Projecting Offensive Power…
responsive, precise, and persistent

- **Dominant & decisive power from the international domain**
- **Focused Effects: Precision strike, information operations, fires, covert strike, Special Forces, and Marines**
- **Enabled by networked Intelligence, Surveillance & Reconnaissance (ISR) for knowledge superiority**
- **Seize the initiative**
  - **Disrupt enemy timelines**
    - **Preempt adversary options**
      - **Ensure operational success**

SEA STRIKE

Investments

	Time Sensitive Strike	Ship to Objective Maneuver	Persistent ISR	EW / IO
	REPRESENTATIVE PROGRAMS			
Transformational	**UCAV-N** **JSF** **NFN** **AESA** **TACTOM** **MIDS**	**ERGM** **AGS** **MV-22** **ESG Concept**	**Exp Sensor Grid Concept** **BAMS UAV** **ADS**	**AEA** **NNWC**
Core	**ATFLIR** **F/A-18E/F** **JDAM** **JSOW** **LGB** **Tomahawk**	**LCAC SLEP** **SOF ASDS**	**MMA** **IUSS** **EP-3E JMOD**	**ICAP III** **FIWC**

Stretch Goal:

- Sensor to Shooter from Minutes to Seconds
- Deep Inland STOM Continuous ISR

Near-Term Goal:

- Sensor to Shooter from Hours to Minutes
- STOM

SEA STRIKE

Investments

	REPRESENTATIVE PROGRAMS			
Transformational	•JSF •CVN(X) •DD(X) •SSGN •Tactical Tomahawk	•MV-22 •Expeditionary Strike Group •LHA(R)	•Global Hawk •Unmanned Underwater Vehicle (UUV) •E-2 Radar Modernization Program	•Airborne Electronic Attack (AEA) Aircraft
Core	•CVN-77 •F/A-18E/F •JDAM	•LHD-8 •LPD-17	•Multi-Mission Aircraft (MMA) •SSN-774	•Improved Capability EA-6B (ICAP III)
	Time Sensitive	Ship to Objective	Persistent ISR	EW / IO

Stretch Goal:
- Sensor to Shooter from Minutes to Seconds
- Deep Inland STOM Continuous ISR

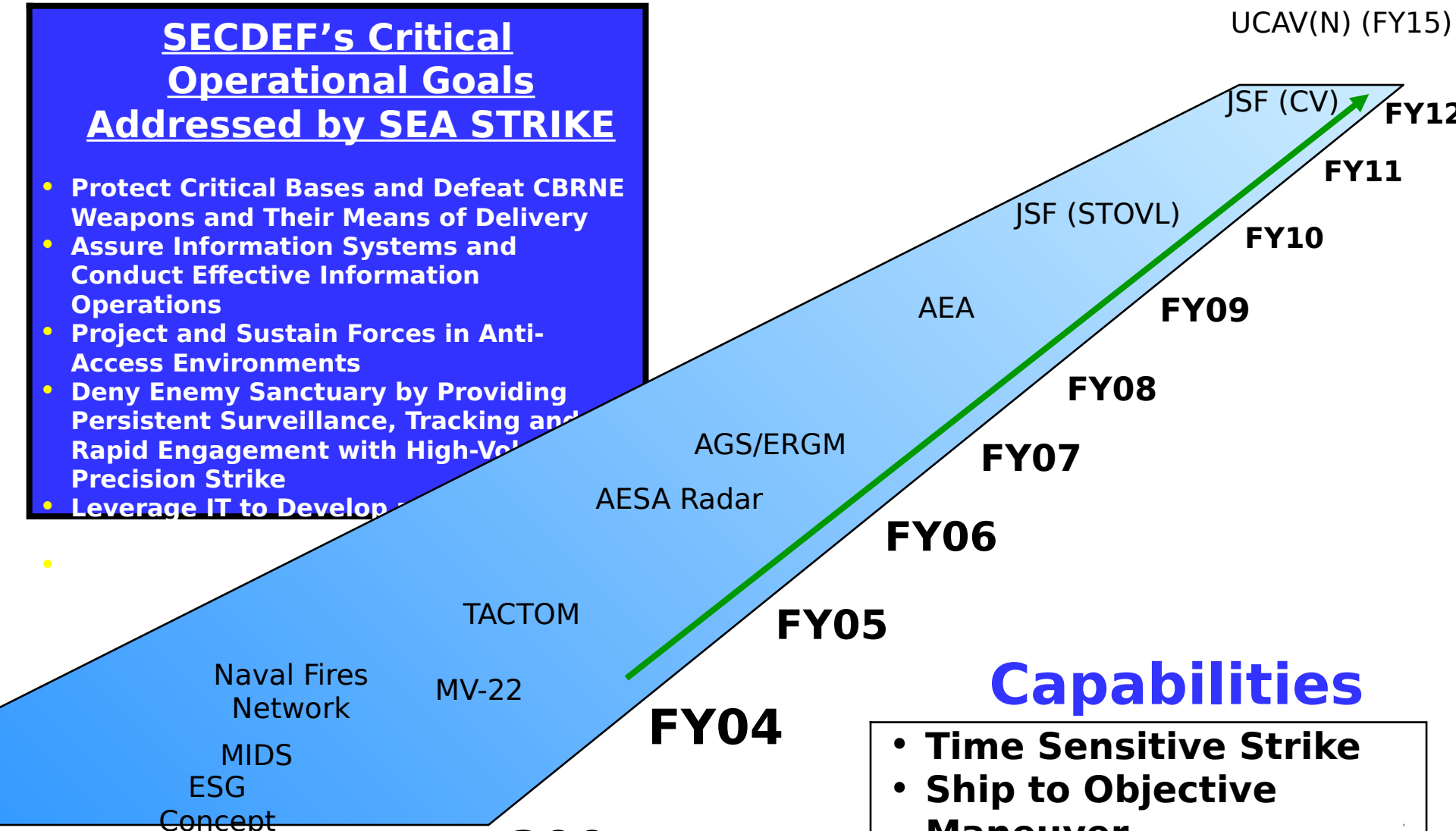
Near-Term Goal:
- Sensor to Shooter from Hours to Minutes
- STOM

SEA STRIKE

Roadmap

SECDEF's Critical Operational Goals Addressed by SEA STRIKE

- Protect Critical Bases and Defeat CBRNE Weapons and Their Means of Delivery
- Assure Information Systems and Conduct Effective Information Operations
- Project and Sustain Forces in Anti-Access Environments
- Deny Enemy Sanctuary by Providing Persistent Surveillance, Tracking and Rapid Engagement with High-Vol… Precision Strike
- Leverage IT to Develop …



Capabilities

- Time Sensitive Strike
- Ship to Objective Maneuver
- Persistent ISR
- EW / IO

SEA STRIKE

Impact

- **Amplified, effects-based striking power**
- **Increased precision attack & information operations**
- **Enhanced warfighting contribution of Marines & Special Operating Forces**
- **“24 / 7” offensive operations**
- **Seamless integration with joint strike packages**

SEA STRIKE

Future Technologies

- **Autonomous, organic, long-dwell sensors**
- **Integrated national, theater, and force sensors**
- **Knowledge-enhancement systems**
- **Unmanned combat vehicles**
- **Hypersonic missiles**
- **Electro-magnetic rail guns**
- **Hyper-spectral imaging**

SEA STRIKE

Action Steps

- **Accelerate information dominance via FORCEnet**
- **Develop, acquire, and integrate systems to increase combat reach, stealth, and lethality**
- **Distribute offensive striking capability throughout the entire force**
- **Deploy sea-based, long-dwell sensors**
- **Develop IO as a major warfare area**
- **Synergize with USMC transformation efforts**

SEA SHIELD

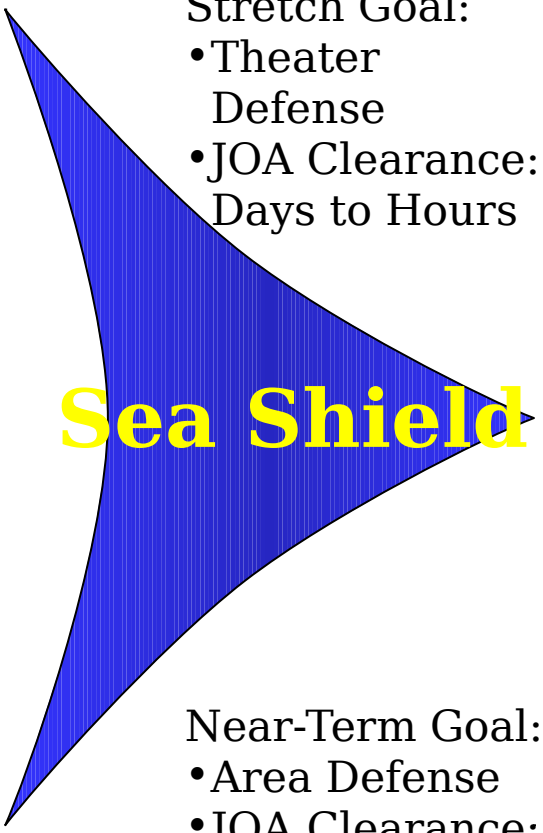
Projecting Defensive Assurance…
assure allies, deter adversaries, sustain access

- **Project layered, defensive power -- globally**
- **Extend homeland security with networked intelligence & forward presence**
- **Sustain access via littoral dominance**
- **Protect joint forces and allies ashore**
  - **Extend defensive umbrella deep inland**
  - **Strengthen strategic stability**
  - **Provide operational security**

SEA SHIELD

Investments

	REPRESENTATIVE PROGRAMS		
Transformational	**BMD** **USCG Deepwater** **AT/FP Systems** **NMIC--Maritime Domain Awareness Concept**	**CUP** **MRUUV** **MH-60R ALFS** **LFA** **ARCI / AST** **Organic MIW Systems** **LMRS**	**NIFC-CA/SM-5** **VSR** **E-2 RMP** **CEC** **Distributed Weapons Control**
Core	**NBC Response Capability** **AT/FP Infrastructure**	**P-3 AIP** **Mk 54** **CBASS** **CIWS 1B**	**AADC** **SM 2 BLK IIIB** **AIM-9X / JHMCS** **AMRAAM** **NULKA** **ESSM** **RAM**
	Homeland Defense	**Sea / Littoral Control**	**Theater Air Missile Defense**



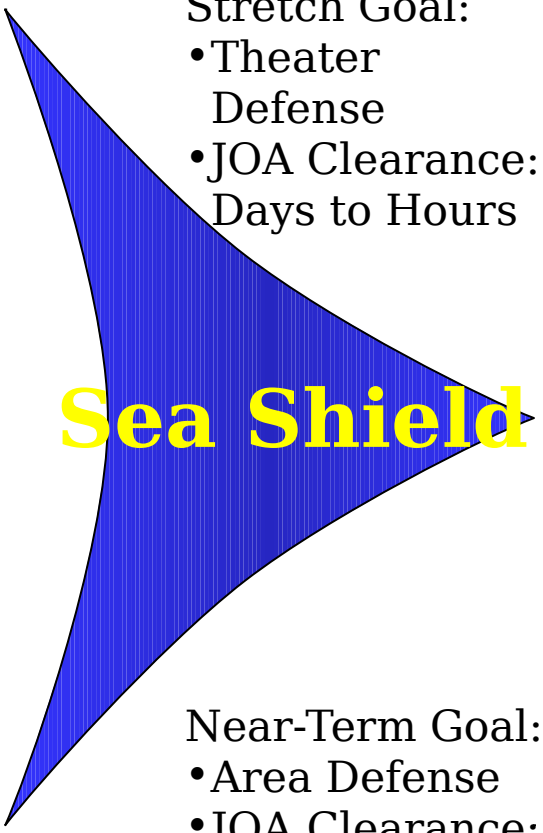
Stretch Goal:
- Theater Defense
- JOA Clearance: Days to Hours

Near-Term Goal:
- Area Defense
- JOA Clearance: Weeks to Days

SEA SHIELD

Investments

	REPRESENTATIVE PROGRAMS		
Transformational	•**Ballistic Missile Defense (BMD)** •**USCG Deepwater Project**	•**LCS** •**DD(X)** •**Global Hawk**	•**CG(X)** •**SM-5** •**Cooperative Engagement Capability (CEC)**
Core	•**NBC Response Capability** •**National Maritime Intelligence Center (NMIC)** •**AT/FP**	•**SSN 774** •**SSN 688 ERO** •**P-3 AIP**	•**DDG-51** •**CG Conversion** •**SM 2 BLK IIIB** •**AIM-9X**
	Homeland	**Sea / Littoral**	**Theater Air**



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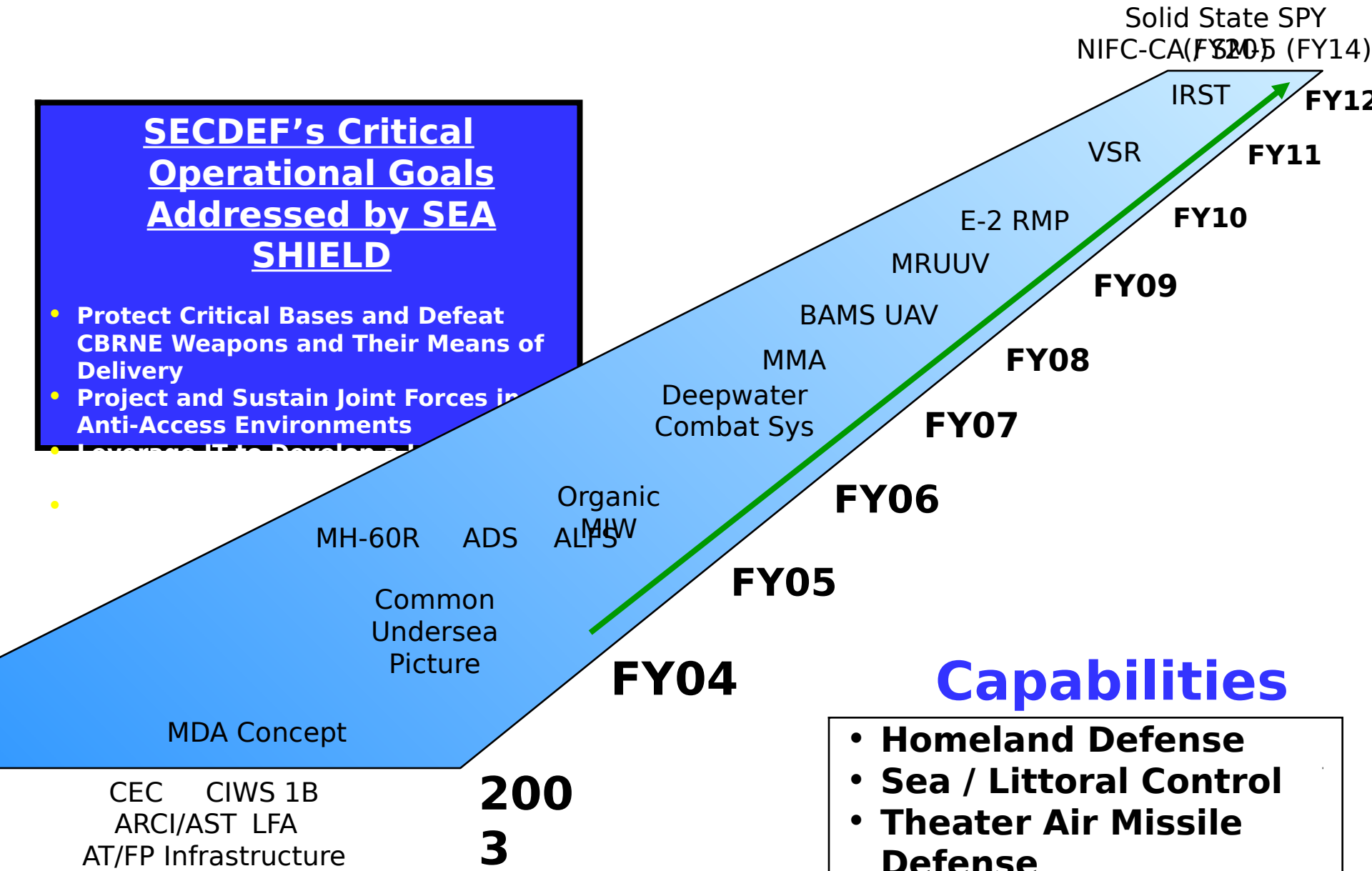
SEA SHIELD

Roadmap



SECDEF's Critical Operational Goals Addressed by SEA SHIELD

- **Protect Critical Bases and Defeat CBRNE Weapons and Their Means of Delivery**
- **Project and Sustain Joint Forces in Anti-Access Environments**

Capabilities

- **Homeland Defense**
- **Sea / Littoral Control**
- **Theater Air Missile Defense**

SEA SHIELD

Impact

- **Projected defense for joint forces and allies ashore**
- **Sustained access for maritime trade, coalition building, and military operations**
- **Extended homeland defense through forward presence and networked intelligence**
- **Enhanced international stability, security, and engagement**

SEA SHIELD

Future Technologies

- **Interagency intelligence & communications reach-back systems**
- **Organic mine countermeasures**
- **Multi-sensor cargo inspection equipment**
- **Advanced hull forms & modular mission payloads**
- **Directed energy weapons**
- **Autonomous unmanned vehicles**
- **Common Undersea Picture**
- **Single Integrated Air Picture**
- **Distributed Weapons Coordination**

SEA SHIELD

Action Steps

- **Expand combat reach**
- **Deploy Theater Missile Defense as soon as possible**
- **Create Common Operational Pictures for air, surface, and subsurface forces**
- **Accelerate the development of sea-based unmanned vehicles to operate in every environment**
- **Invest in self-defense capabilities to ensure sea superiority**

SEA BASING

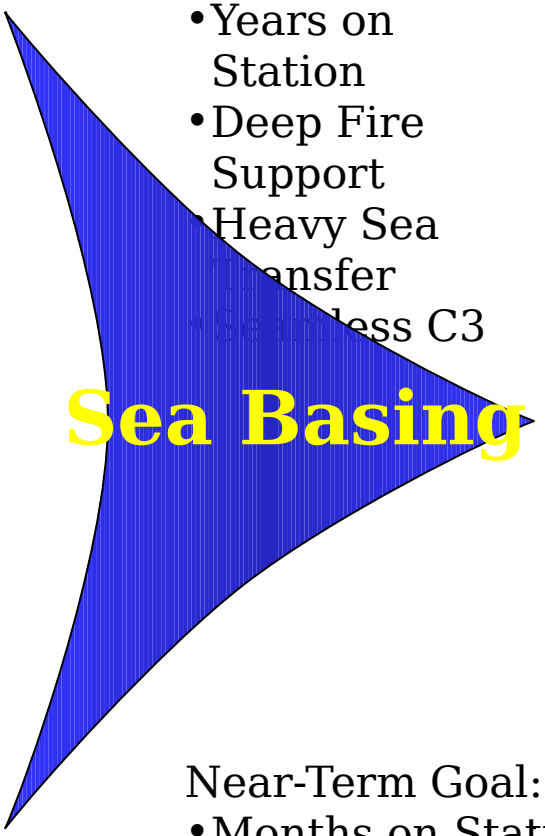
Projecting Operational Independence…
joint power from the sea

- **Sea-bases key joint warfighting capabilities**
  - **Offensive & defensive power projection**
  - **Command & control**
  - **Logistics**
- **Extends naval advantages to the joint team**
  - **Freedom of operations**
  - **Immediate employability**
  - **Increased security**
  - **Sustained access**
- **70% of the earth's surface as joint**

SEA BASING

Investments

	REPRESENTATIVE PROGRAMS		
Transformational	**FORCEnet Concept** **EC5G Concept** **DCGS-N** **DJC2** **AEHF Terminal** **Web-Enabling** **CDL-N** **COWAN**	**CVN (X)** **CG (X)** **DD (X)** **LCS** **SSGN** **LHA (R)**	**MPF (F)** **HLLCAC** **ILC Concept** **HSV**
Core Programs	**MUOS** **NTCSS** **NMCI / IT-21** **GCCS-M** **JTRS** **SHF Terminals** **BLII** **GBS**	**CVN-77** **LHD-8** **LPD-17** **SSN-774** **DDG-51**	**MH-60S** **T-AOE (X)** **T-AKE**
	Command and Control	**Afloat Power Projection**	**Logistics**



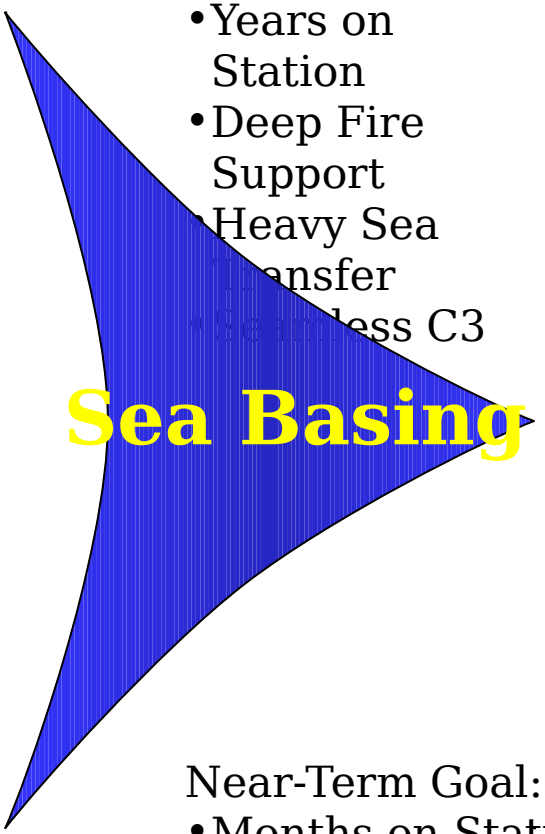
Stretch Goal:
- Years on Station
- Deep Fire Support
- Heavy Sea [illegible]ansfer
- [illegible]ess C3

Near-Term Goal:
- Months on Statio
- Coastal Fire Support
- Light Sea Transfe
- Enhanced C3

SEA BASING

Investments

	REPRESENTATIVE PROGRAMS		
Transformational	•**FORCEnet Concept** •**Deployable Joint Command & Control System (DJC2)**	•**CVN(X)** •**CG(X)** •**DD(X)** •**LCS** •**SSGN** •**LHA(R)**	•**Maritime Pre-positioned Force (Future) MPF(F)**
Core Programs	•**NMCI / IT-21** •**Global Command & Control System-Maritime (GCCS-M)** •**Mobile User Objective System (MUOS)**	•**CVN-77** •**LHD-8** •**LPD-17** •**SSN-774** •**DDG-51**	•**MH-60S** •**T-AOE(X)** •**T-AKE**



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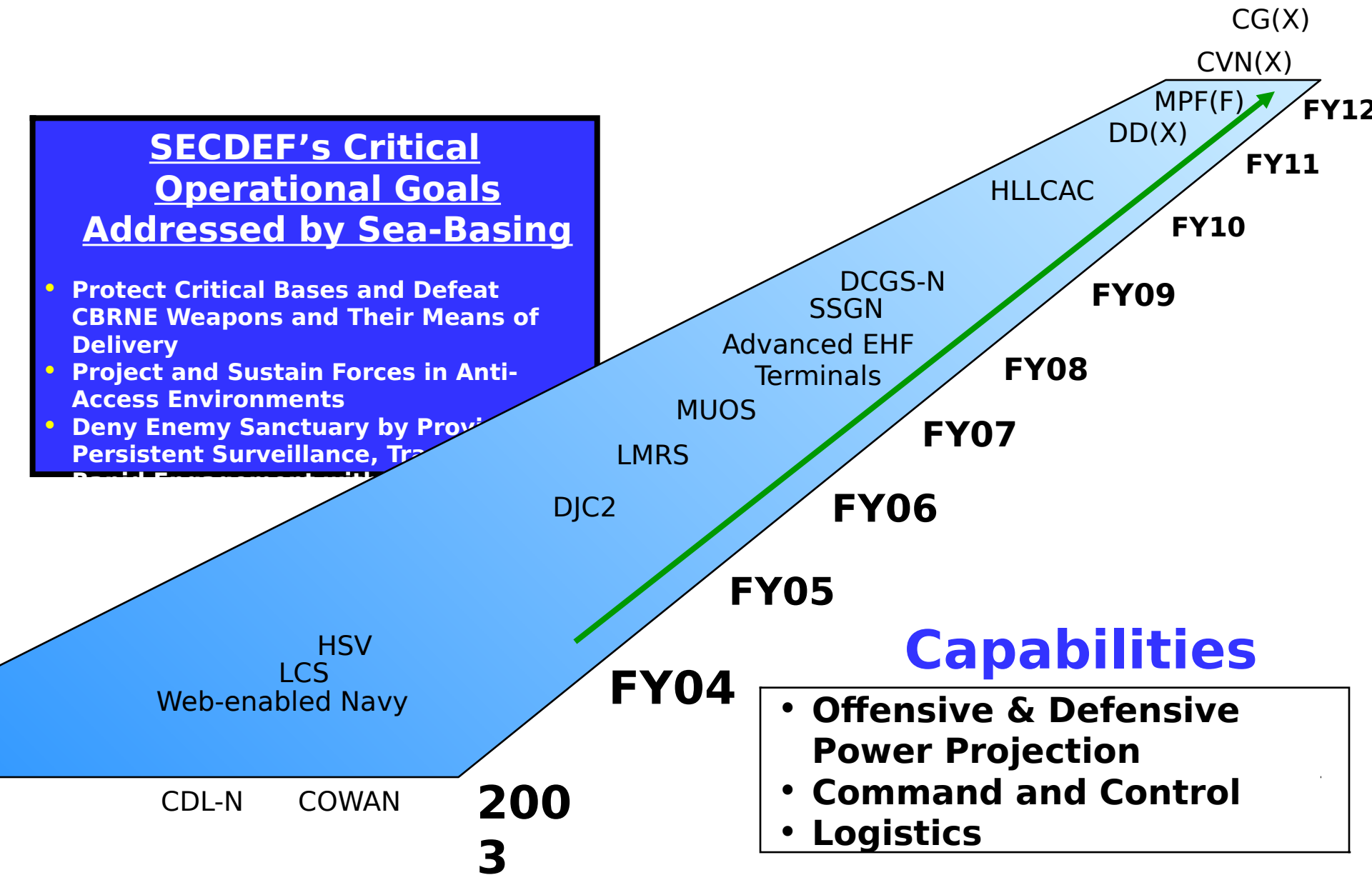
SEA BASING

Roadmap



SEA BASING

Impact

- **Pre-positioned warfighting capabilities for immediate employment**
- **Enhanced joint support from a fully netted, dispersed naval force**
- **Strengthened international coalition building**
- **Increased joint force security and operational agility**
- **Minimized operational reliance on shore infrastructure**

SEA BASING

Future Technologies

- **Enhanced joint command and control**
- **Heavy equipment transfer capabilities**
- **Intra-theater high-speed sealift**
- **Improved vertical delivery methods**
- **Integrated joint logistics**
- **Rotational crewing infrastructure**
- **International data-sharing networks**

SEA BASING

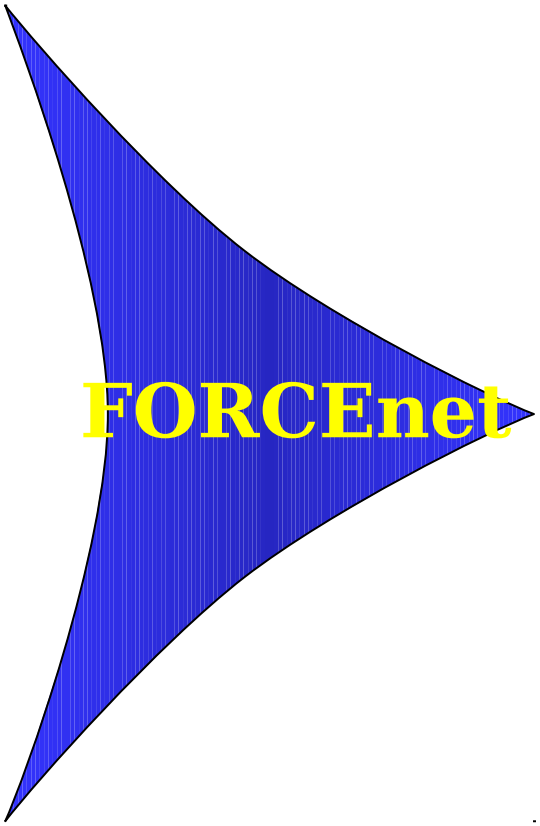
Action Steps

- **Exploit the advantages of sea-based forces wherever possible**
- **Develop technologies to enhance on-station time and minimize maintenance requirements**
- **Experiment with innovative employment concepts and platforms**
- **Challenge every assumption that results in shore basing of Navy capabilities**

FORCEnet

Integrating warriors, sensors, weapons, networks, and platforms

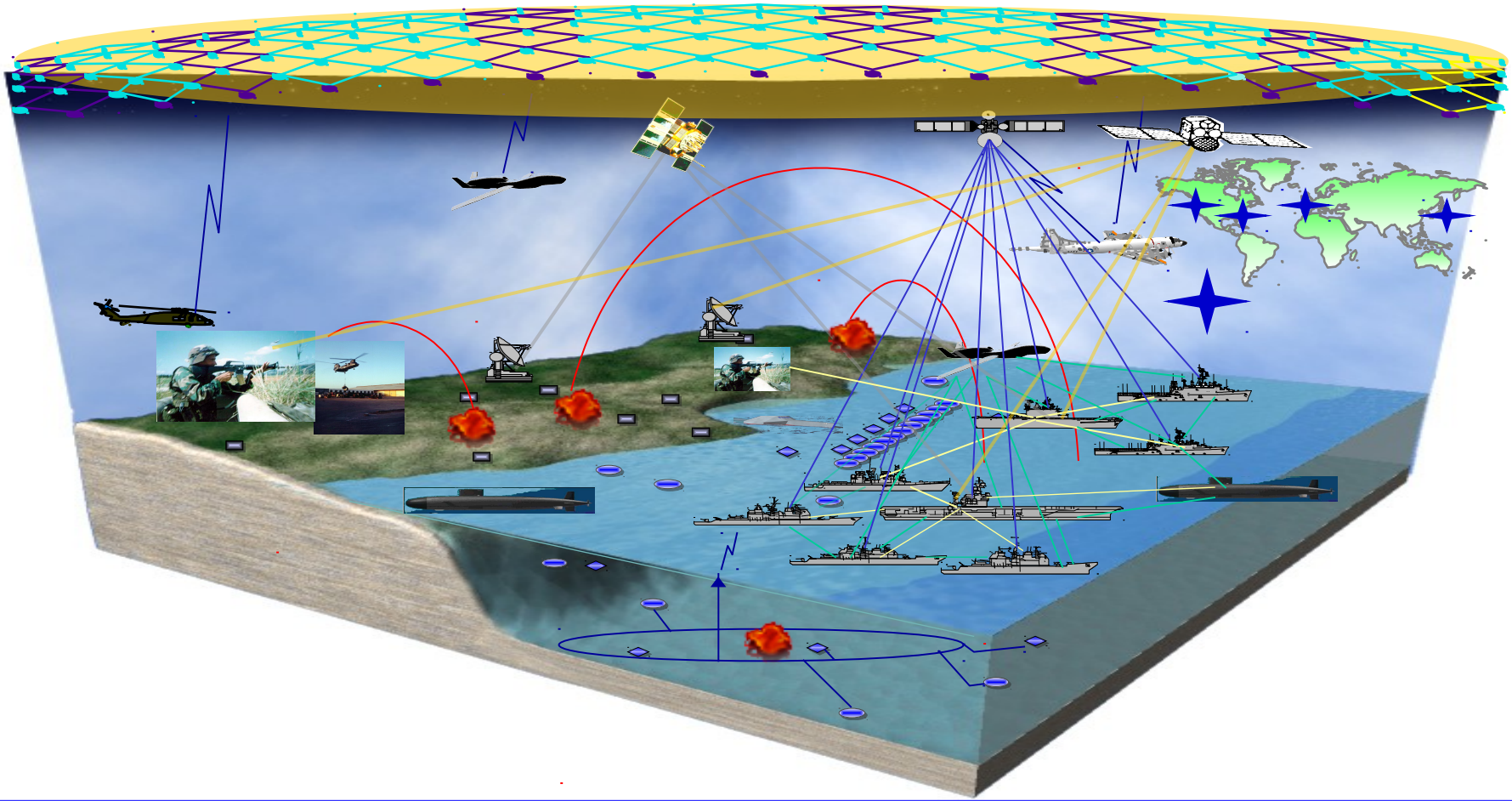
- **Framework for Info-Age Warfare**
- **Major increases in combat power by:**
  - **Connecting sensors, networks, weapons, command & control, platforms, and warriors**
  - **Accelerating speed and accuracy of decision**
  - **Integrating knowledge to dominate the battlespace**



FORCEnet

Linking sensors, weapons, decision aids, and warriors

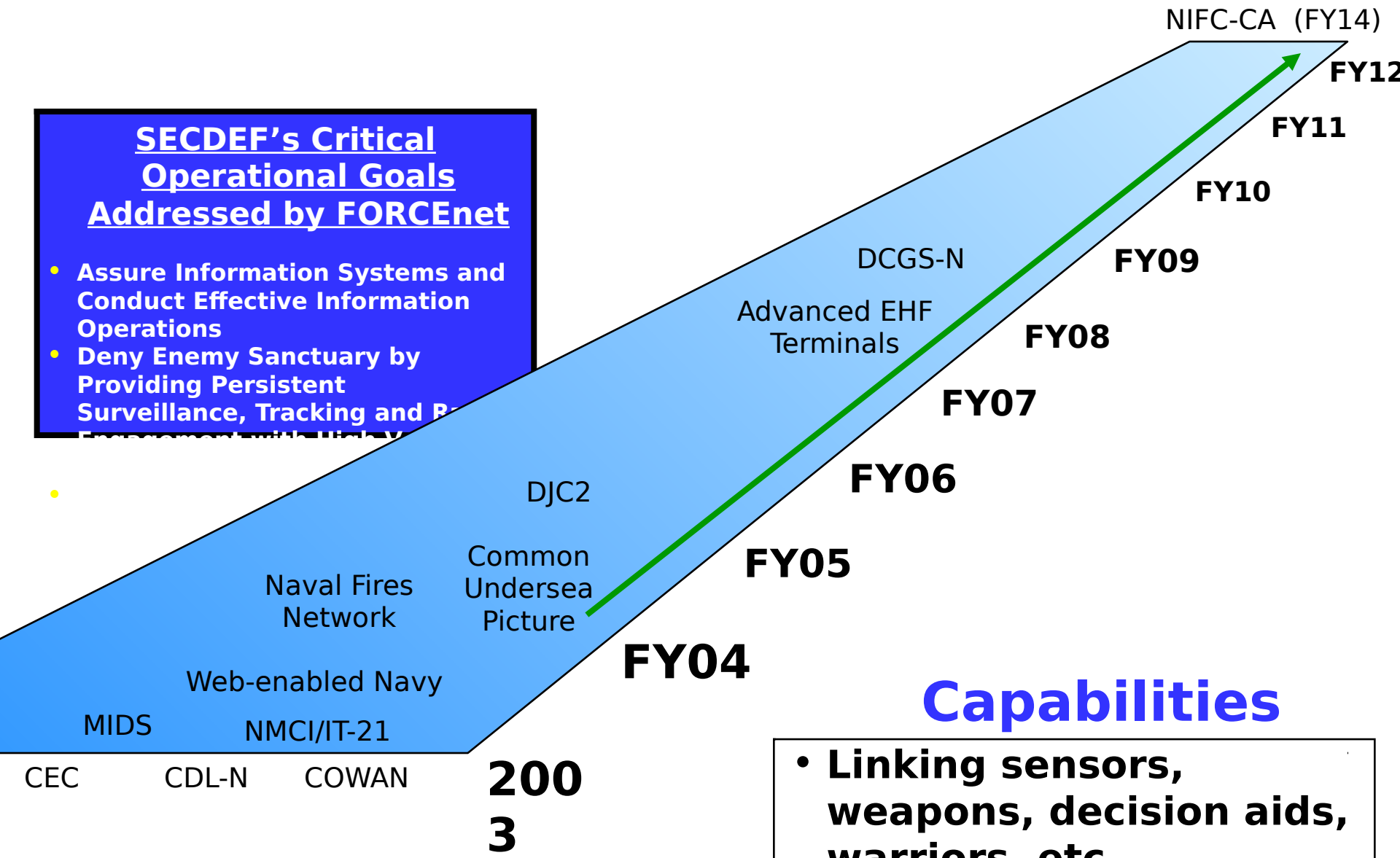
Seamless Information Grid



Integrates the power of people, sensors, weapons, networks, and platforms

FORCEnet

Roadmap



SECDEF's Critical Operational Goals Addressed by FORCEnet

- **Assure Information Systems and Conduct Effective Information Operations**
- **Deny Enemy Sanctuary by Providing Persistent Surveillance, Tracking and R**
- **Fragdement with High V**

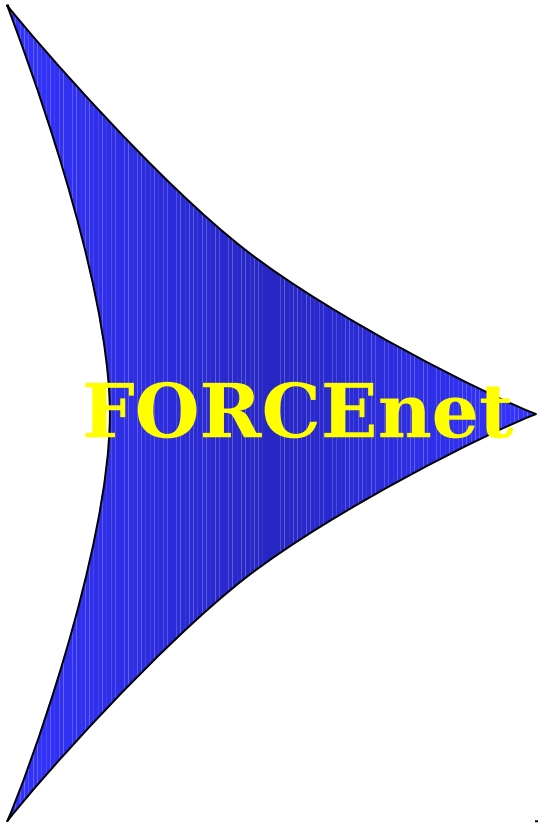
Capabilities

- **Linking sensors, weapons, decision aids, warriors, etc**

FORCEnet

Impact

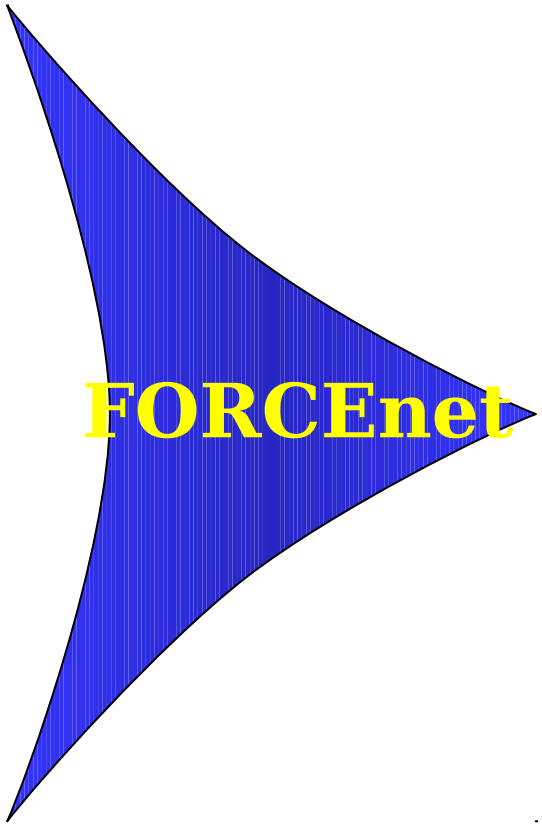
- **Connected warriors, sensors, networks, command and control, platforms, and Weapons**
- **Accelerated speed and accuracy of decision**
- **Integrated knowledge to dominate the battlespace**



FORCEnet

Capabilities

- **Expeditionary, multi-tiered, sensor and weapons grids**
- **Distributed, collaborative command and control**
- **Dynamic, multi-path, and survivable networks**
- **Adaptive / automated decision aids**
- **Human-centric integration**



TRANSFORMATIONAL IMPACT

Sea Strike

- ***Double strike aim points*** within 10 years
- ***Continuous battlespace coverage*** via long-dwell sensors
- ***Agile targeting*** via unmanned loitering vehicles
- ***Enhanced strike*** via Expeditionary Strike Groups

Sea Shield

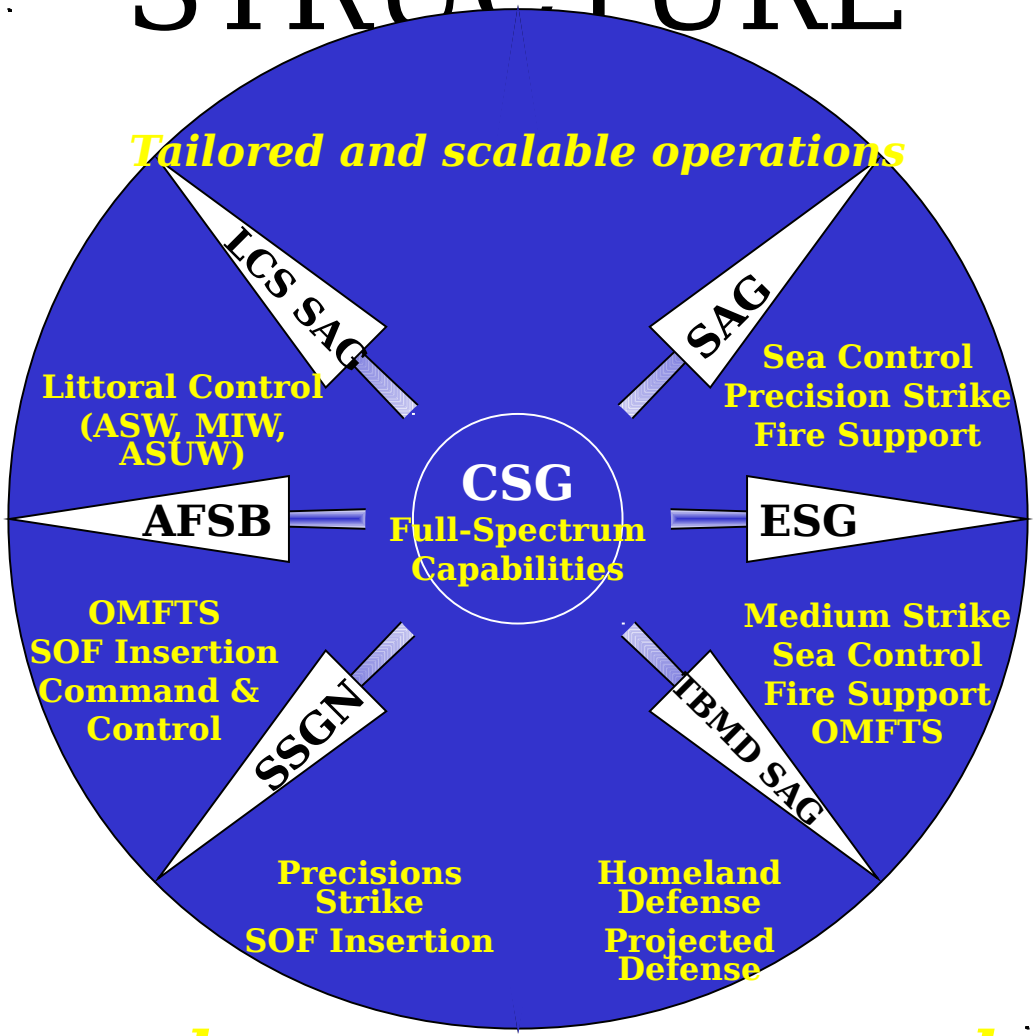
- ***Extended homeland defense*** via forward deployed forces
- ***Sustained access*** via networked ships, submarines & aircraft
- ***Projected defense*** over joint force and allies
- ***Ballistic missile defense*** over

Sea Basing

- ***Offensive & defensive power projection--*** unprecedented reach, accuracy, and lethality
- ***Global connectivity*** afloat for joint commanders
- ***Forward bases & logistics*** via pre-positioned ships &

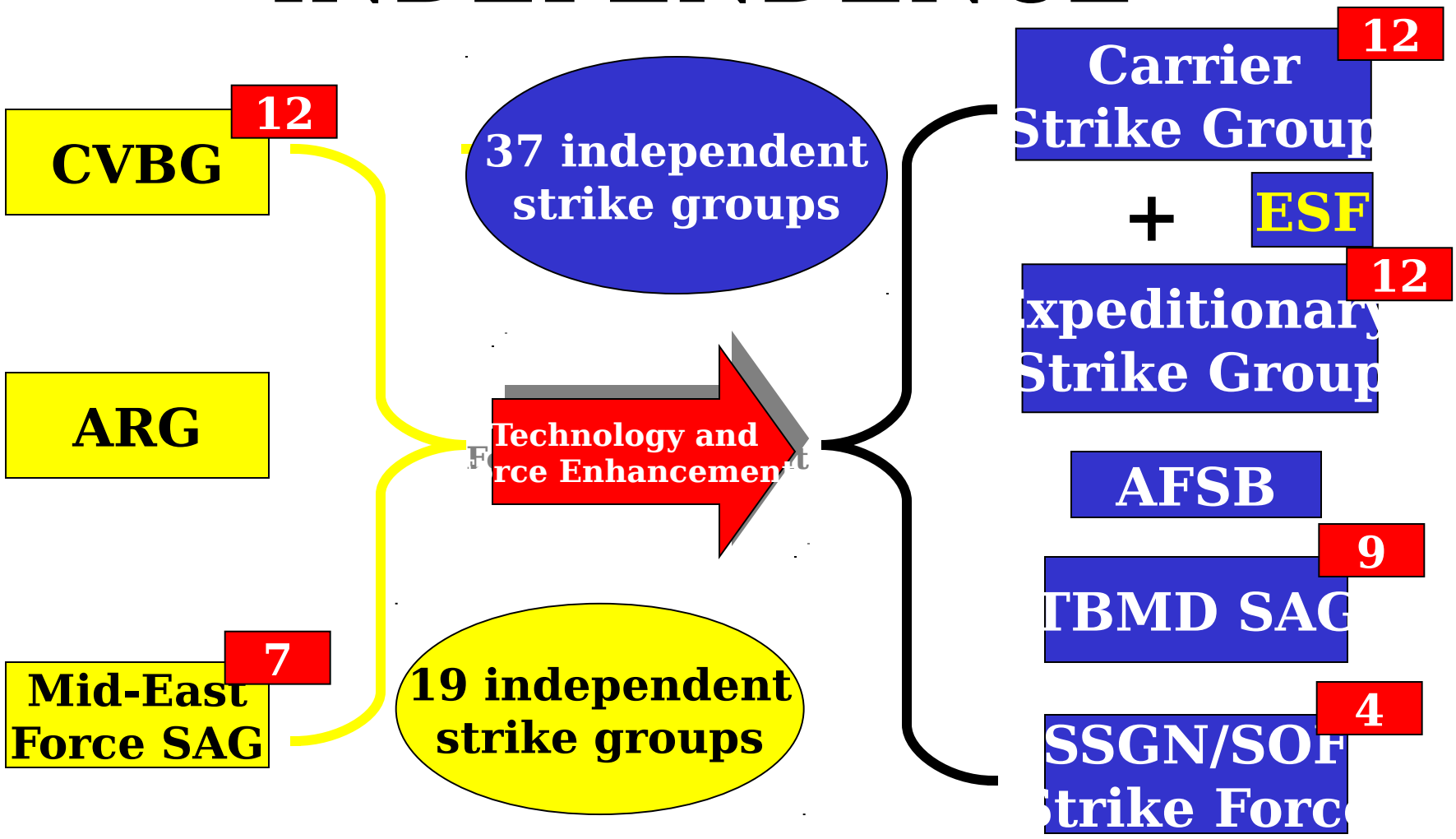
Fully integrating naval, land, and air forces across a unified battlefield

ADAPTIVE FORCE STRUCTURE



Exploit naval maneuver space and random deployment patterns to disrupt enemy timelines, seize and sustain

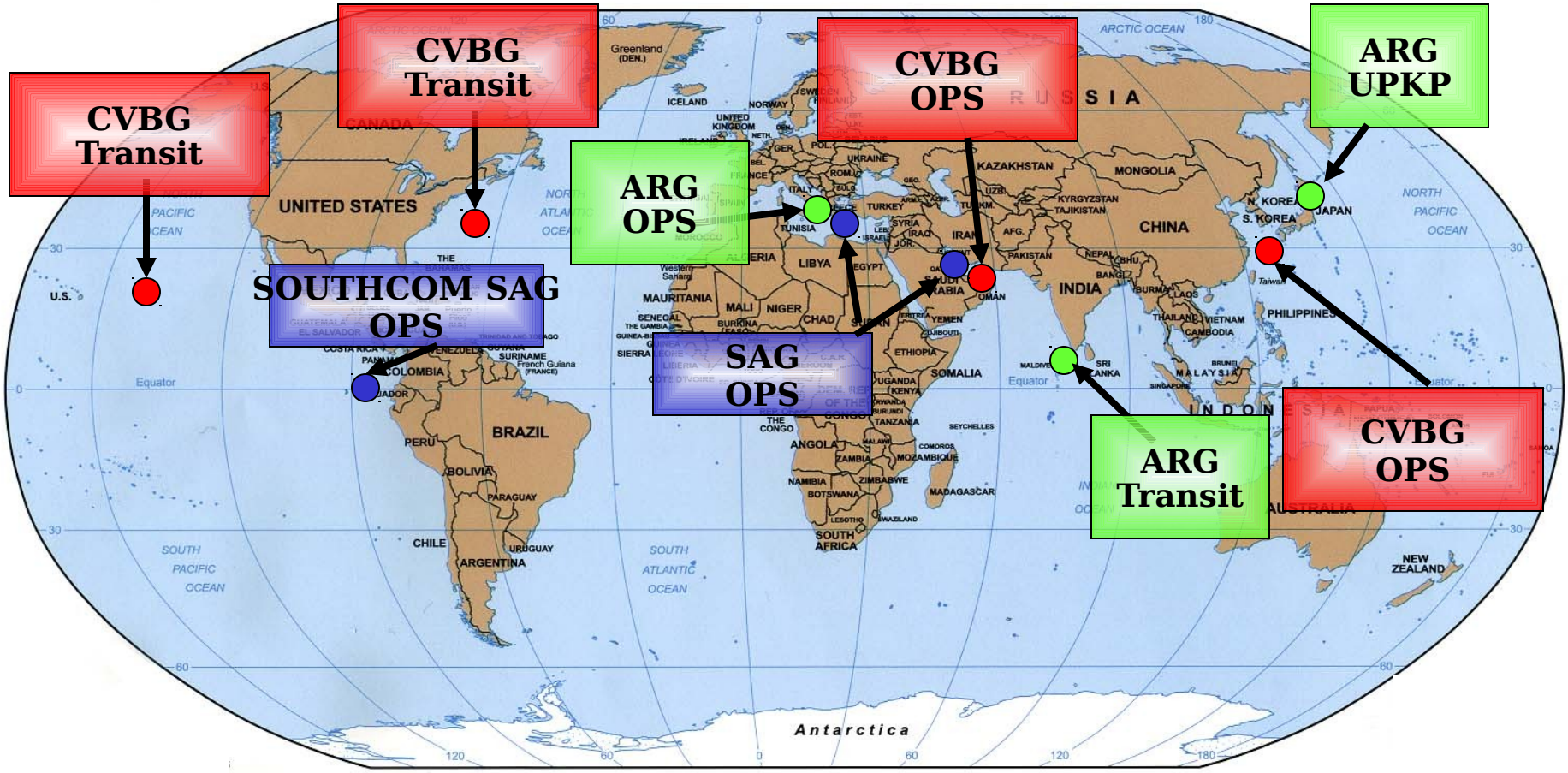
OPERATIONAL INDEPENDENCE



Maximizing combat flexibility for 1/4/2/1

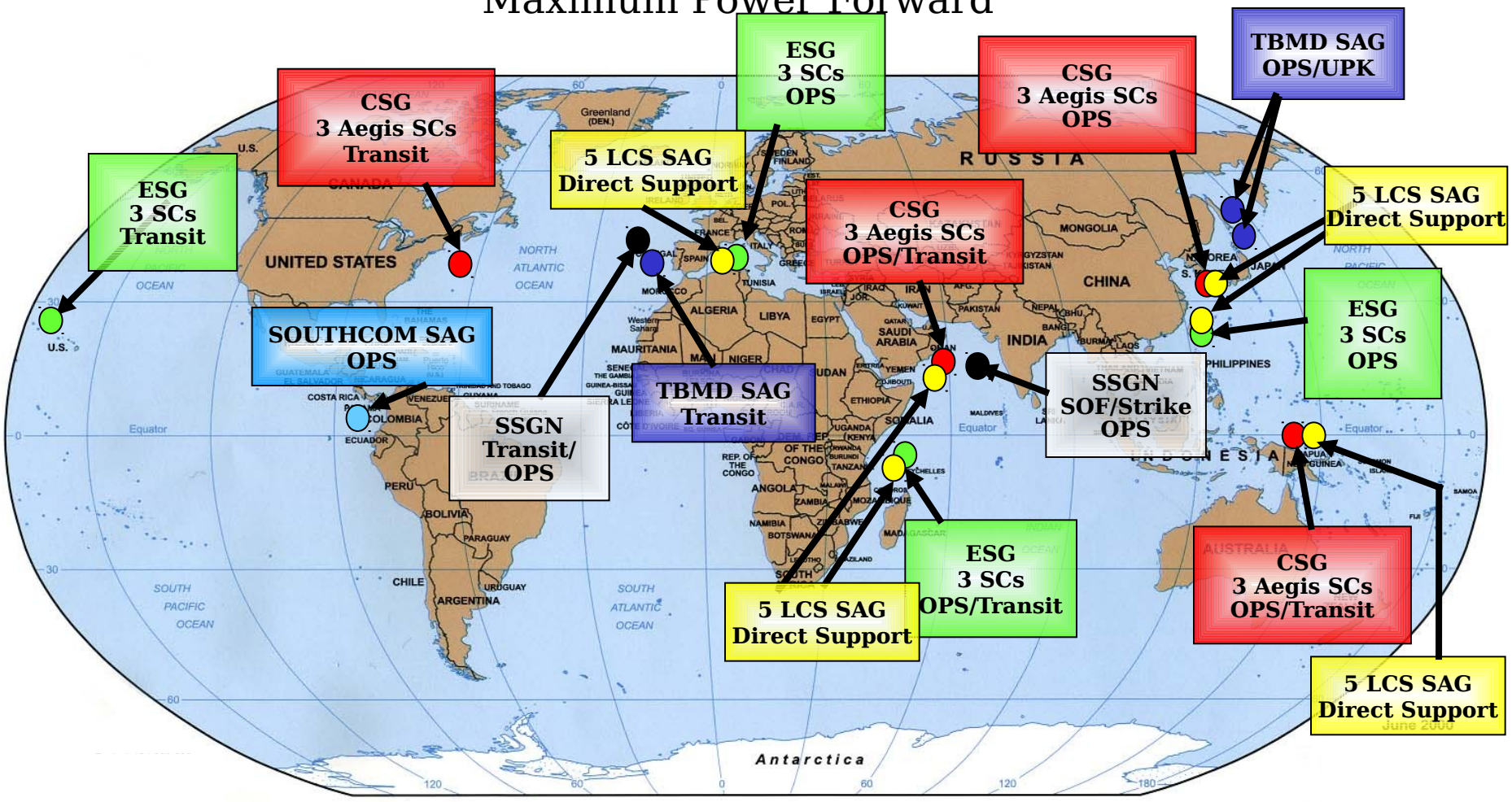
THE NAVY TODAY

Any Month 2001 (Pre-9/11)



GLOBAL CONCEPT OF OPERATIONS

Maximum Power Forward

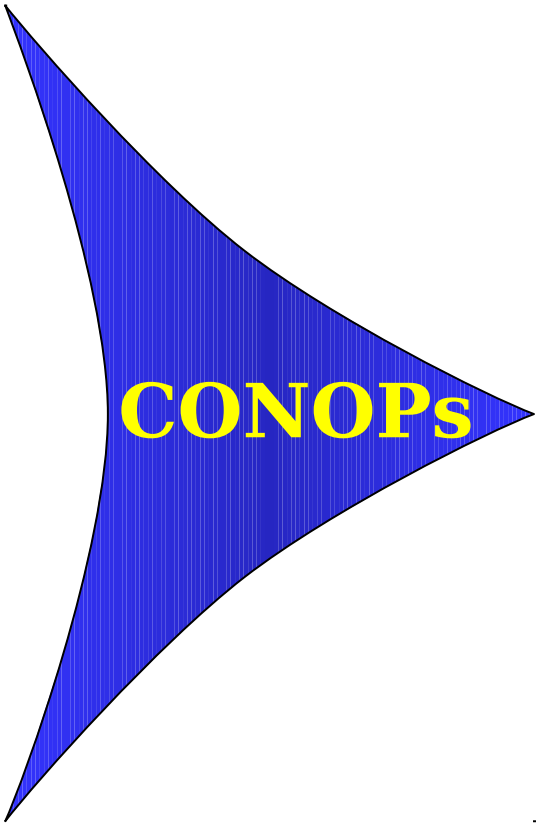


CV(N)	Amphibious Ships	Surface Combatants	Subs	CLF	MIW	Support & Command	Total
12	37	160	73	42	26	25	375

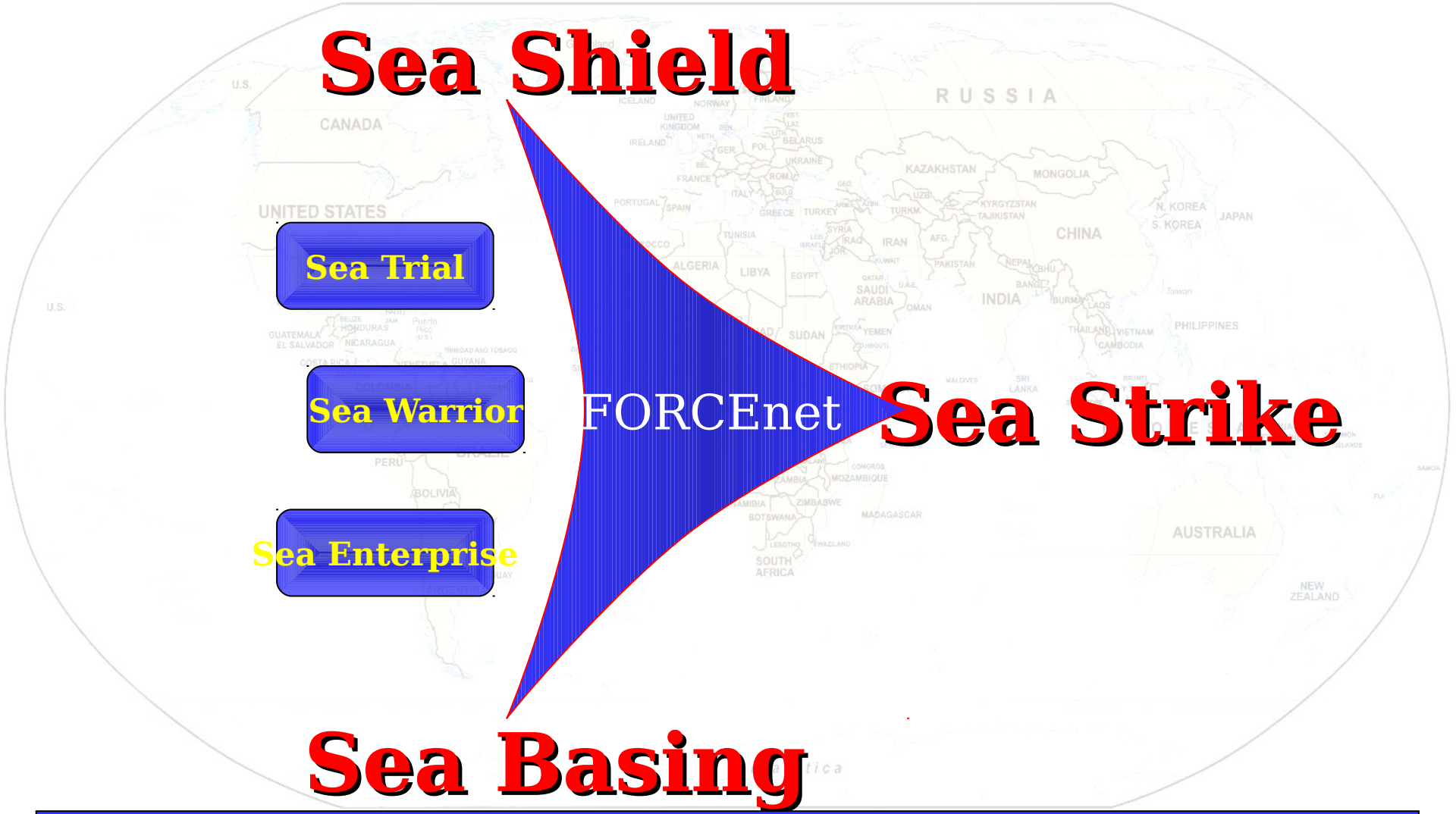
GLOBAL CONCEPT OF OPERATIONS

Impact

- **Widely distributed, fully netted striking power to support joint operations**
- **Increased presence, enhanced flexibility, and improved responsiveness**
- **Task-organized to deter forward, respond to crises, and win decisively**



SEA POWER 21



Enabling Processes

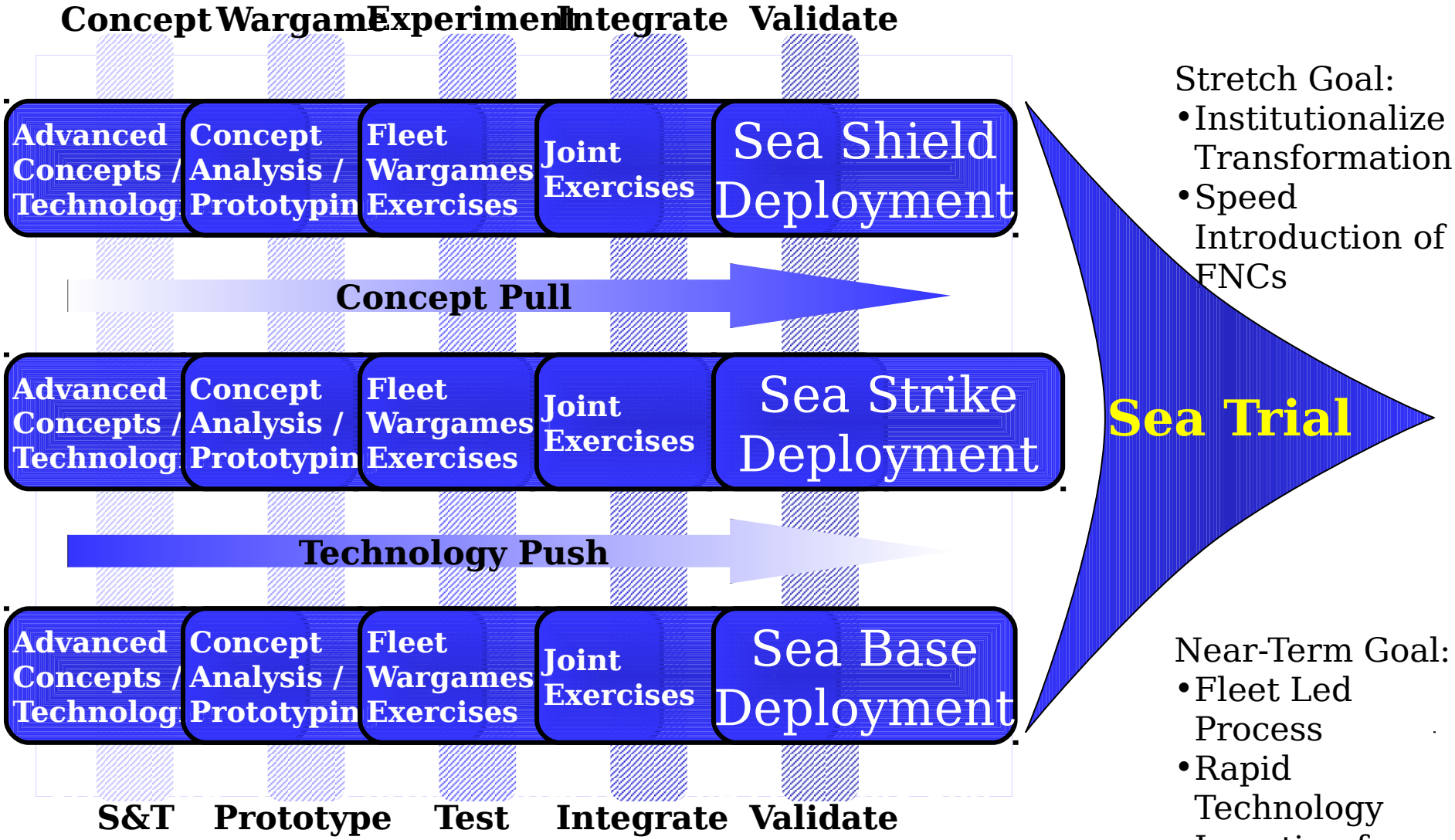
SEA TRIAL

Process of Innovation…
concept development, rapid prototyping, coordinated experimentation

- **Integrate concept and technology development**
  - **Defined ownership of concepts**
  - **Targeted wargames, experiments and exercises**
  - **Focused developmental investment**
- **Fleet leadership**
  - **CFFC oversight**
  - **Fleet sponsors & co-sponsors**
  - **Spearhead elements to deploy & validate**
- **Enduring process of innovation to accelerate enhanced capabilities to**

SEA TRIAL

Process



Stretch Goal:

- Institutionalize Transformation
- Speed Introduction of FNCs

Near-Term Goal:

- Fleet Led Process
- Rapid Technology Insertion for GWOT

SEA TRIAL

Impact

- **Fleet-led, enduring process of innovation**
- **Accelerated concept and technology development**
- **Enhanced headquarters / fleet alignment**

SEA WARRIOR

Investing in Sailors…
the right skills, in the right place, at the right time

- **Sailors are our capital asset**
  - **Foundation of warfighting effectiveness**
  - **Life-long investment**
- **Achieve combat-ready Total Force**
  - **Enhanced recruiting**
  - **Innovative training**
  - **Optimal employment**
- **Realize full potential of all-volunteer force**
  - **Highly skilled**
  - **Continuously educated**
  - **Powerfully motivated**

SEA WARRIOR

Initiatives

KEY INITIATIVES			
	Web-based Marketplace		TF Excel
WPA	Dynamic Incentivization	Advanced Counseling Tools	
RIDE / JOIN	Innovative Manning Concepts	E-Learning	
			Simulators
Lateral Conversion	SkillsNET	Civ Grad Ed	BFTT
	Skill Portability	NPS	
NRAMS	SAIL	JPME	IMAT
		PACE	JPATS
	Team Detailing	Top 6	
	Super JASS		
Selection & Classification	**Assignment**	**Growth & Development**	**Training**

Stretch Goal:

- Realize Personal & Professional Potential of Total Force
  - Education
  - Assignment
  - Skills

Near-Term Goal:

- Fully Man OEF Reqs
- Incentivize and Customize

SEA WARRIOR

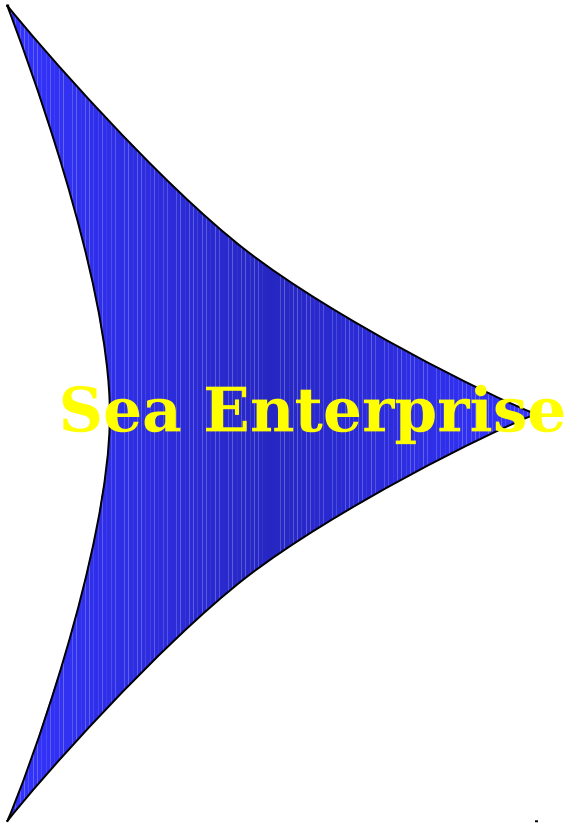
Impact

- **Continual professional growth and development**
- **Improved selection and classification**
- **Interactive, web-based, incentivized detailing**
- **Networked, high-impact training**

SEA ENTERPRISE

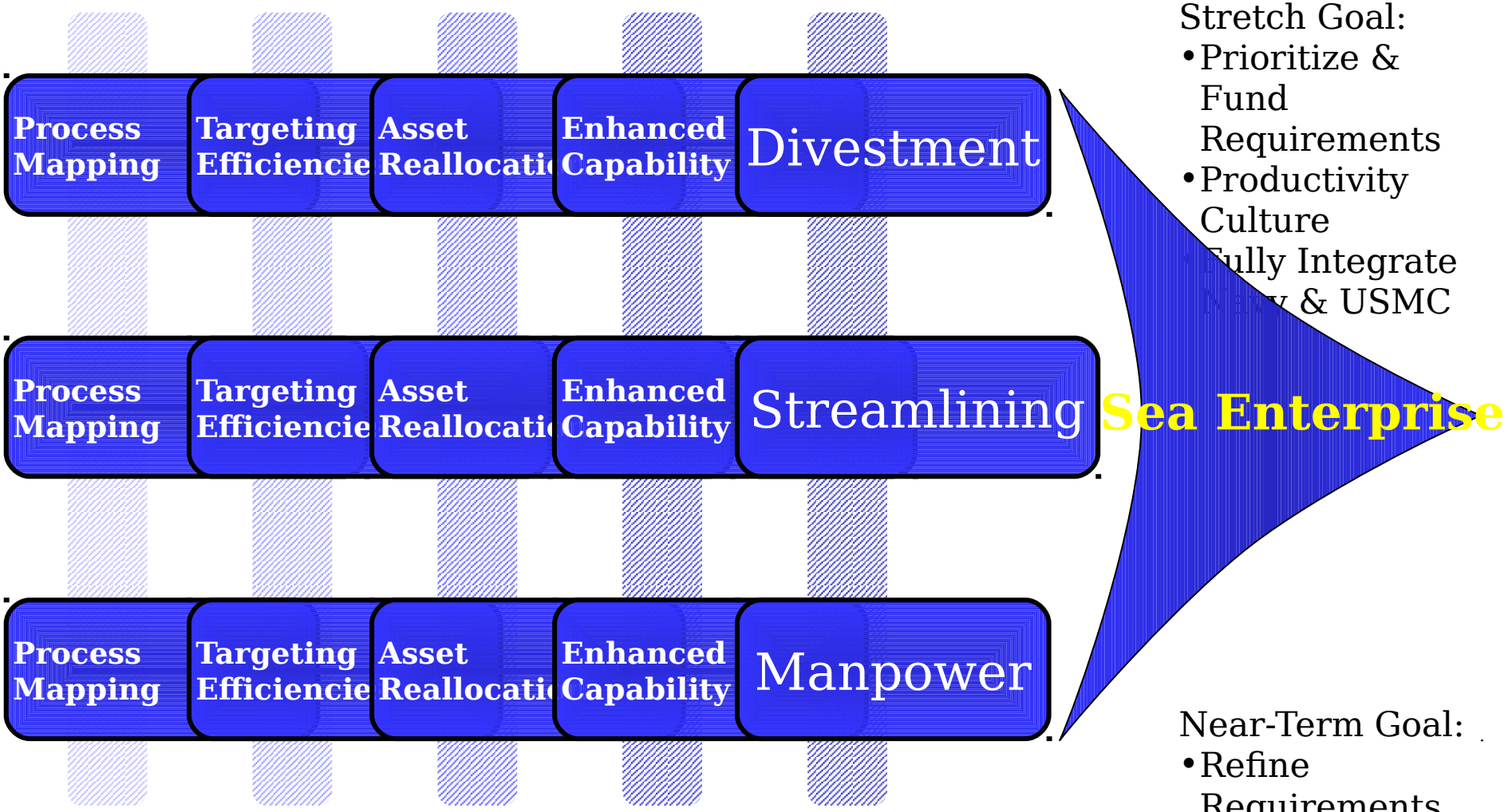
Resourcing Tomorrow's Fleet…
optimum resource allocation, increased productivity, enhanced procurement

- **Identify & harvest efficiencies**
  - **Divest non-core functions**
  - **Organizational streamlining**
  - **Manpower reduction through technology insertion and process alignment**
- **Fund future readiness**
  - **Enhanced investment in warfighting capability**
  - **Accelerate transformation**
- **Inculcate culture of productivity**



SEA ENTERPRISE

Process



Stretch Goal:

- Prioritize & Fund Requirements
- Productivity Culture
- Fully Integrate [illegible] & USMC

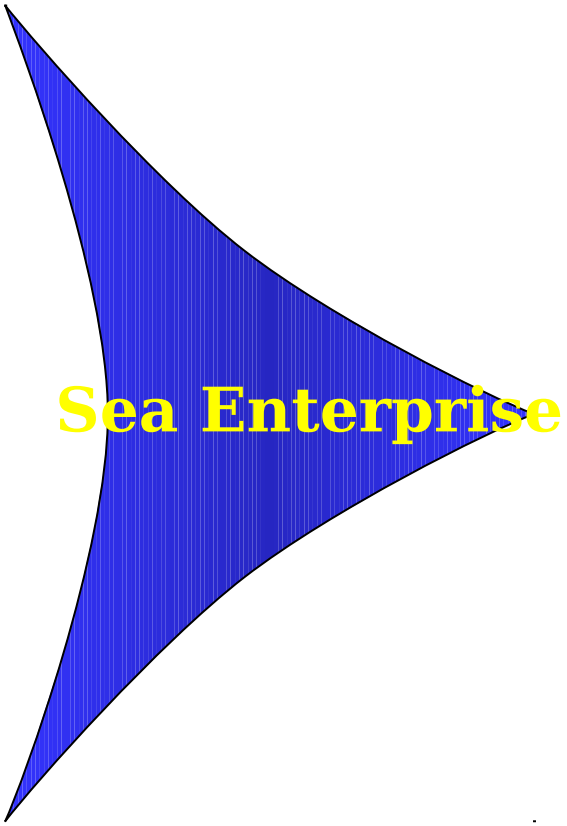
Near-Term Goal:

- Refine Requirements
- Productivity Measurements

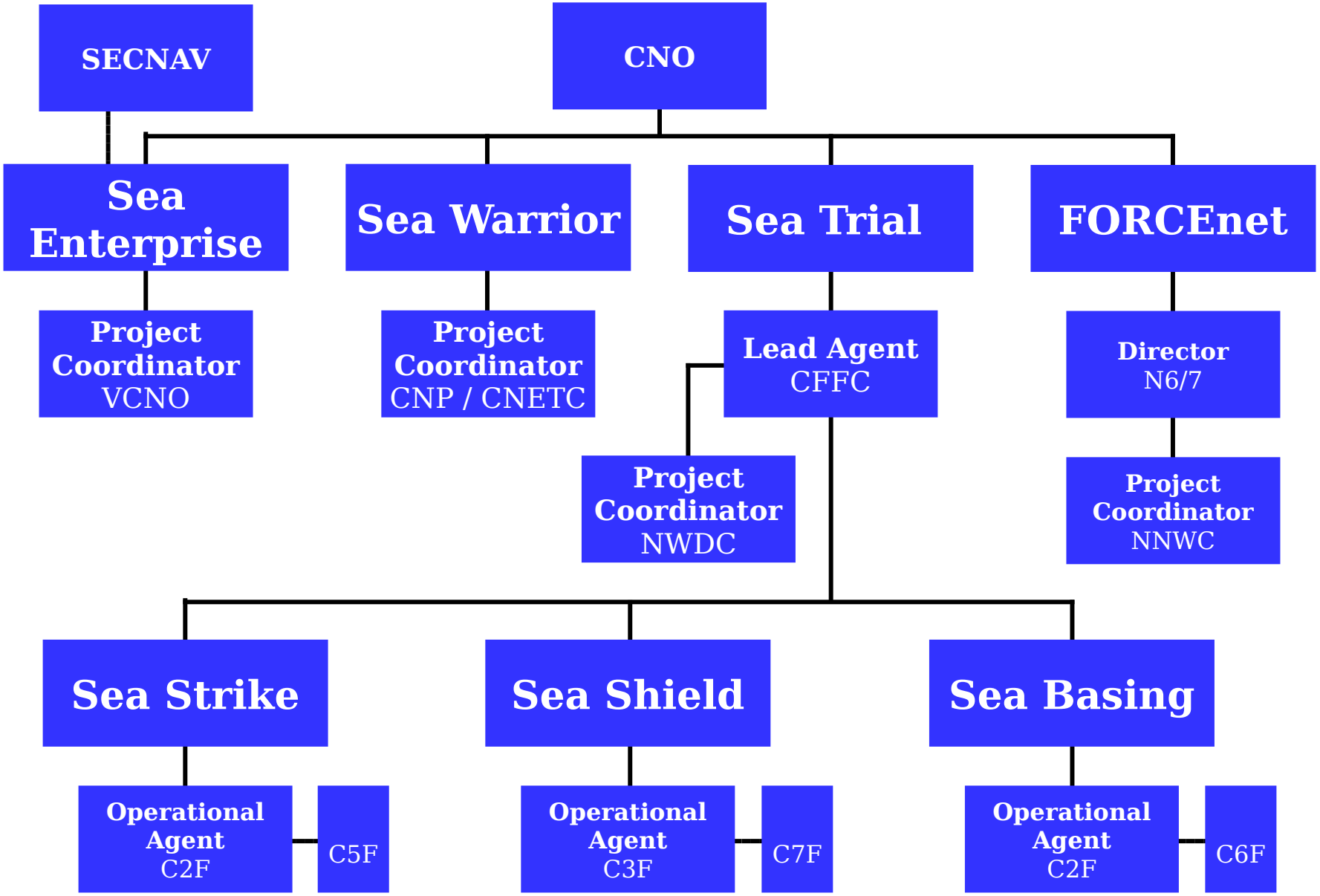
SEA ENTERPRISE

Impact

- **Greater process efficiencies**
- **Divestment of non-core functions**
- **Organizational streamlining**
- **Enhanced investment in warfighting capability**



OPERATIONAL STRUCTURE



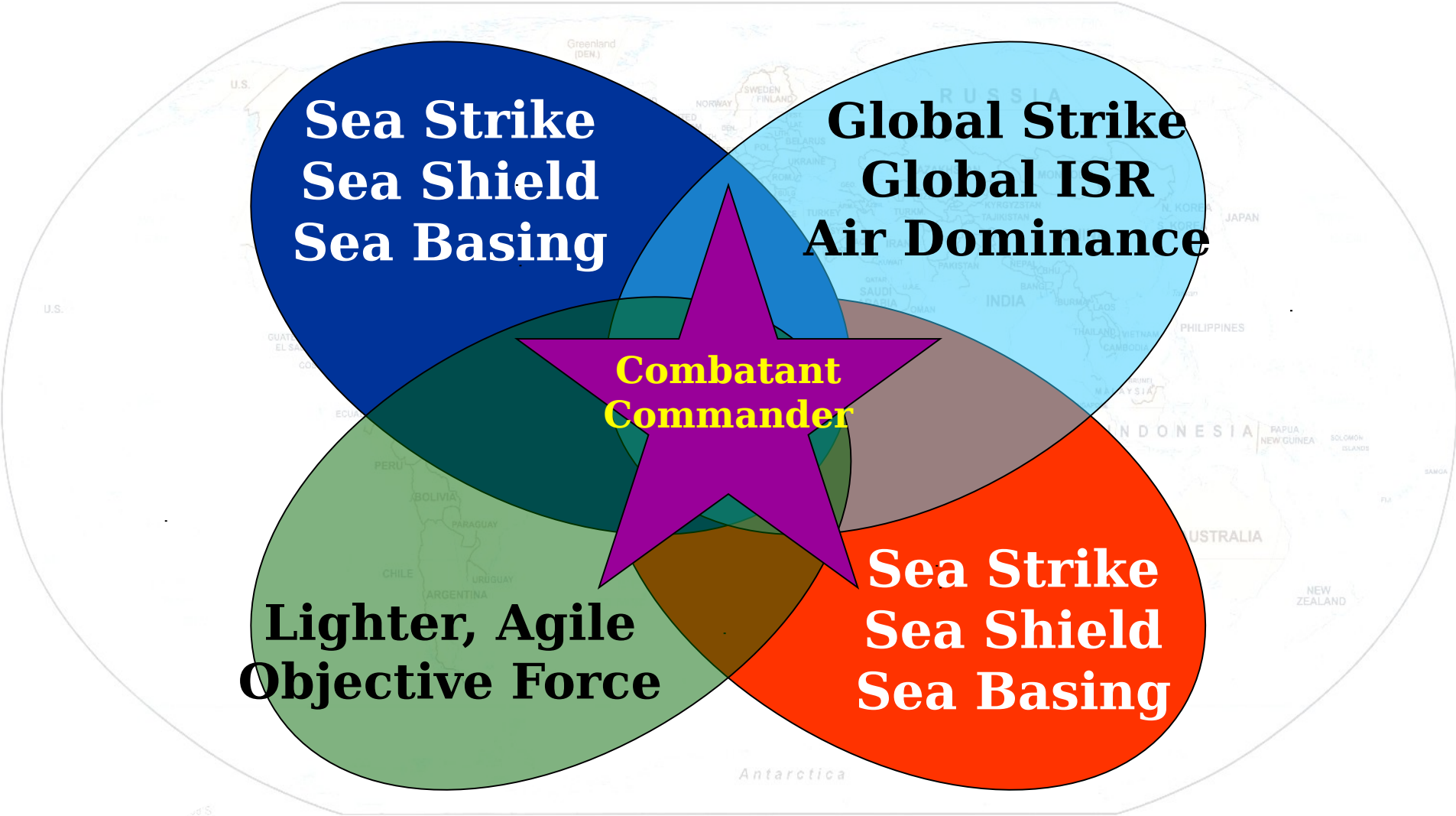
DPG TRANSFORMATION GOALS

	Sea Strike	Sea Shield	Sea Basing
1. Protect U.S. homeland and bases overseas		✓	✓
2. Project and sustain power in distant theaters	✓	✓	✓
3. Deny enemy sanctuaries	✓		✓
4. Protect information networks from attack	✓		✓
5. Use information technology to link U.S. forces to fight jointly	✓	✓	✓
6. Maintain access to space and protect space capabilities from enemy attack		✓	✓

4-2-1 STRATEGY

	Sea Strike	Sea Shield	Sea Basing
1. Deterrence in *four* theaters	✓	✓	✓
2. Swiftly defeat *two* aggressors	✓	✓	✓
3. Massive counter-offensive to replace *one* regime	✓	✓	✓

COMPLEMENTARY JOINT CONCEPTS



THE CHALLENGE…

"Our security will require transforming the military … (to) be ready to strike at a moment's notice in any dark corner of the world."

George W. Bush
01 June 2002

Sea Strike

Projecting Offense…global presence, precision, and

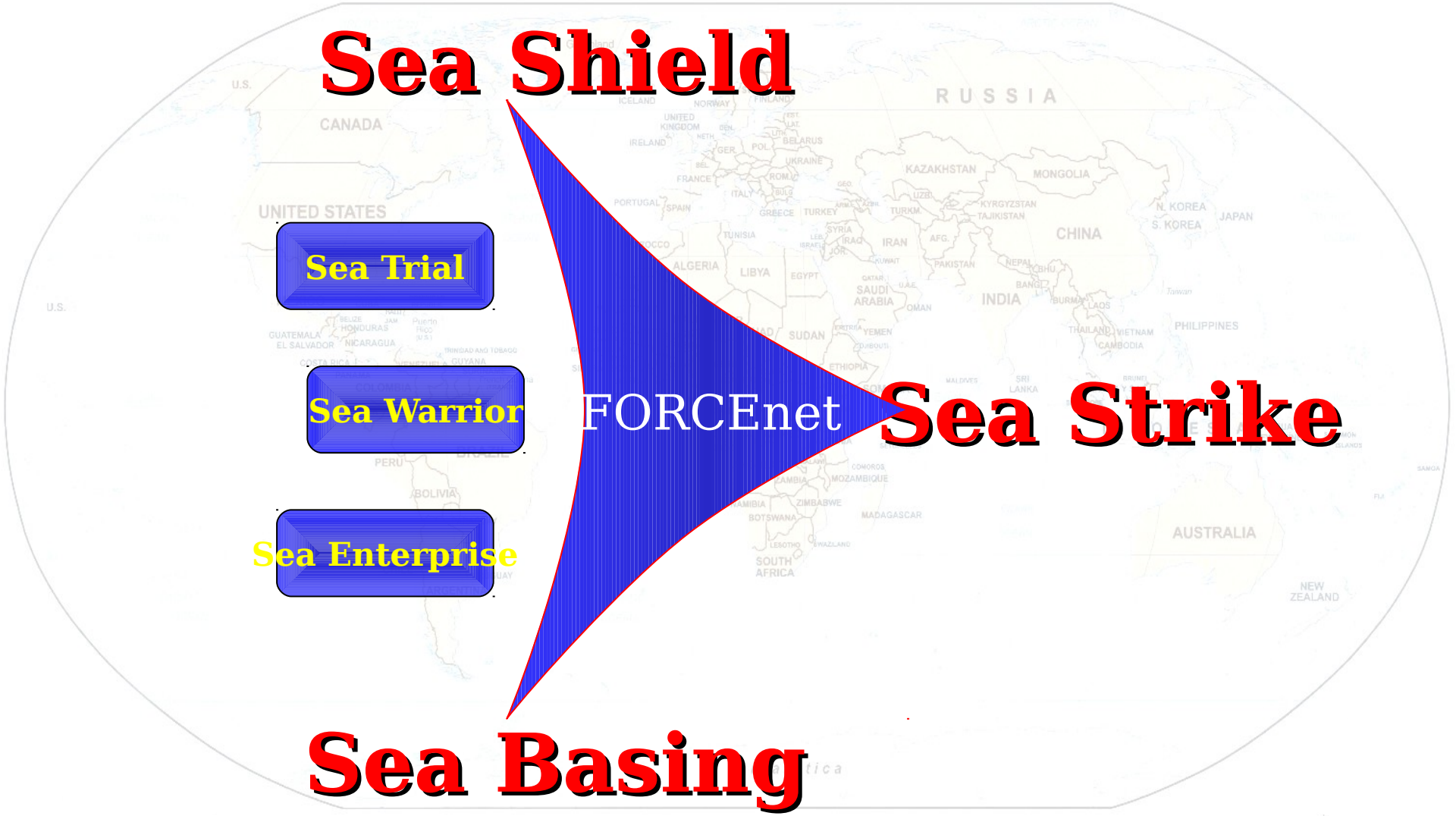
Sea Shield

Projecting Defense…assure allies, deter

Sea Basing

Projecting Operational Independence…joint power

SEA POWER 21


Sea Shield
Sea Trial
Sea Warrior
Sea Enterprise
FORCEnet
Sea Strike
Sea Basing